

VERSION WITH MARKINGS TO SHOW CHANGES MADE TO CLAIMS UNDER
37 CFR 1.121(B)(1)(iii) FILED ON JANUARY 6, 2003

69. (five times amended) A therapeutic agent being a radio-labeled soluble precipitable material for use as a pro-drug which is to be converted into an insoluble and non-digestible radio-labeled precipitate by the action of a non-mammalian enzyme when the therapeutic agent is administered to a living host containing a heterogeneous population of cancer cells including at least a sub-population of cancer cells being the target cells, each including a first antigenic receptor, the therapeutic agent being adjacent to the target cancer cells subsequent to the administration to the living host of a bispecific reagent, the bispecific reagent when administered to a living host being bound to the target cancer cells, the bispecific reagent containing two moieties, the first moiety which is a non-mammalian enzyme moiety being a first enzyme moiety, the bispecific reagent further containing a second moiety including a target agent moiety which has a substantial affinity for the first antigenic receptor of the target cancer cells, the therapeutic agent to be converted in the extra-cellular fluid of the living host, adjacent to the bispecific reagent, into an insoluble and non-digestible radio-labeled precipitate which is an extra-cellular radio-labeled precipitate by the action of the first enzyme moiety of the bispecific reagent, the bispecific reagent to be bound to the target cancer cells, the therapeutic agent being from a group consisting of peptides, including opio-melanins, of carbohydrates, including cellulose, chitosan, and chitin, of proteoglycans, of synthetic polymers, and of substituted indoxyl compounds containing molecular positions 1-7, the extra-cellular radio-labeled precipitate having an epitope selected from the group consisting of a first antigenic epitope, being an epitope which is an integral part

of the structure of the extra-cellular radio-labeled precipitate, a second antigenic epitope, and a neo-antigenic third epitope, the neo-antigenic third epitope not being present on the therapeutic agent, the extra-cellular radio-labeled precipitate remaining in the extra-cellular fluid adjacent to the bispecific reagent for an extended period of time sufficient to kill non-selectively all cells adjacent to the extra-cellular radio-labeled precipitate.

71. (four times amended) A therapeutic agent in accordance with claim 69 in which a cell-impermeant [material] chemical group is attached to the therapeutic agent, the cell-impermeant [material] chemical group causing the therapeutic agent to be cell impermeant.

72. (five times amended) A therapeutic agent in accordance with claim 71 in which the cell-impermeant [material] chemical group is selected from the group consisting of thiol chemical groups, anionic [materials] chemical groups, and [material] cell impermeant chemical groups including peptides and polymers of a molecular weight greater than 1000 daltons.

75. (four times amended) A therapeutic agent in accordance with claim 74 in which the soluble intermediate molecule having the characteristic to be oxidized in the natural environment within the extra-cellular fluid, the oxidized soluble intermediate molecule being spontaneously dimerized, thereby forming the extra-cellular radio-labeled precipitate.

76. (five times amended) A therapeutic agent in accordance with claim 69 in which each of the indoxyl compounds is selected from the group consisting of indoxyl-lactam and indoxyl-glycosides, which when attached to position 3 of the indoxyl compounds are cleavable by the first enzyme moiety of the bispecific reagent, the material remaining after cleaving at position 3 being a soluble reactive intermediate molecule which can be oxidized and dimerized, thereby forming the extra-cellular radio-labeled precipitate.

77. (four times amended) A therapeutic agent in accordance with claim 69 in which each of the indoxyl compounds can [when attached] be substituted to at least one of positions 4, 5, 6, and 7 of the indoxyl compound to reduce the ability of the extra-cellular radio-labeled precipitate to move in the extra-cellular fluid.

78. (four times amended) A therapeutic agent in accordance with claim 69 in which each of the indoxyl compounds includes phenyl compounds attached at position 4, 5, 6, or 7 of the indoxyl compound to reduce the ability of the extra-cellular radio-labeled precipitate to move in the extra-cellular fluid.

79. (four times amended) A therapeutic agent in accordance with claim 69 in which each of the indoxyl compounds includes benzyloxy compounds attached at position 5 of the indoxyl compounds to reduce the ability of the indoxyl compounds and the extracellular radio-labeled precipitate to move in the extra-cellular fluid.

80. (three times amended). A therapeutic agent in accordance with Claim 69 in which each of the indoxyl compounds includes 5.5-bi-indoxyl compounds and the extracellular radio-labeled precipitate to move by at least one of diffusion and convective flow in the extracellular fluid.

83. Cancel Claim 83 without prejudice.